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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,848	08/06/2001	Alan Rubinstein	3COM-3651.BCG.US.P	2022

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EXAMINER

SHAH, CHIRAG G

ART UNIT	PAPER NUMBER
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2664

DATE MAILED: 07/29/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/923,848

Applicant(s)

RUBINSTEIN ET AL.

Examiner

Chirag G Shah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-30 rejected under 35 U.S.C. 102(e) as being anticipated by Johnson et al. (WO 00/30293).

Referring to claim 1, Johnson discloses in figure 2 of an intelligent device 106 (Fixed Diagnostic Unit and Roving Diagnostic Unit) for coupling an electronic device (hub) to a network (100) comprising: a first interface (port 1) for communicatively coupling said intelligent device 106 to said network 100, said network 100 having a head end (hub 102); a second interface (port 2) for communicatively coupling said intelligent device 106 to a plurality of client devices (such as S2) such that said client devices are communicatively coupled to said network as in figures 2, 3, 17, 19 and 20; means for processing and interpreting data coupled to said first interface (as disclosed in column 5, lines 25-42); and fault detection means coupled to said means for processing and interpreting data, said fault detection means for performing fault detection in said network as disclosed on page 5, lines 25 to page 6, lines 27 as claim.

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Referring to claim 11, Johnson discloses in figure 2 of an intelligent device 106 (Fixed Diagnostic Unit and Roving Diagnostic Unit) for coupling an electronic device (hub) to a network comprising: a first interface (port 1) for communicatively coupling said intelligent device to said network 100, said network 100 having a head end 102; a second interface (port 2) for communicatively coupling said intelligent device 106 to a plurality of client devices (such as S2) such that said client devices are communicatively coupled to said network; a robust processor 110 coupled to said first interface; and a fault detector 108 coupled to said robust processor 110 as further disclosed in figure 3.

Referring to claim 21, Johnson discloses on page 5, lines 25 to page 6, lines 27 and in figure 2 of a method for fault detection in a network, said method comprising the steps of:

- a) providing an intelligent device 106 coupled to a network 100, said intelligent device 106 comprising a first interface (port 1) for communicatively coupling said intelligent device 106 to said network, a second interface (port 2) for communicatively coupling said intelligent device to a plurality of client devices (such as S2), a robust processor 110 coupled to said first interface (port 1), and a fault detector 108 coupled to said robust processor 110, said network having a head end 102;
- b) monitoring said network for a fault by said intelligent device and said head end 102, such that said intelligent device 106 and said head end 102 operate in conjunction as disclosed on page 5, lines 25 to page 6, lines 27 as claim.

Referring to claim 2, 12, and 22, Johnson discloses on page 5, lines 29-42, that arrangement 106 is considered to be highly advantageous due to the fact that

information is obtained and gathered at one location (within the hub) from all of the monitored points, thus disclosing an intelligent device 106 as recited wherein said head end (102) is a central control site operable to remotely access said means for processing and interpreting data as claims.

Referring to claim 3, 13, and 23, Johnson discloses in figure 3 in conjunction to figure 2 and on page 7, lines 12 to page 8, lines 27 of an intelligent device 106 as recited wherein said fault detection means is configured to isolate faults in both an uplink (upstream as S2) from said head end of said network and a downlink (downstream as S1) from said head end of said network as claims.

Referring to claim 4, 14, and 24, Johnson discloses in claims 58 and 59 that an intelligent device (106 in figure 2) as recited in Claim 1 wherein said fault detection means is selected from the group via a loop-back mode for fault detection as claims.

Referring to claim 5, 15, and 25, Johnson discloses in figure 7 and on page 8, lines 28 to page 9, lines 42 that an intelligent device 106 as recited in Claim 1 wherein said intelligent device 106 is configured such that said intelligent device is provided power over said network as claims.

Referring to claim 6, 16 and 26, Johnson as disclosed in figures 2 and 7 that an intelligent device 106 being coupled to the head end 102 as recited in Claim 5 wherein said head end 102 is configured to activate and deactivate said intelligent device 106 over said network based on its connection arrangement such that RDU 110 utilizes methods for diagnosing system failures both outside and inside hub 102 (disclosed on page 10, lines 34-36) as claims.

Referring to claim 7, 17, and 27, Johnson discloses on page 8 lines 12-39 that RDU knows that by performing the RDU station diagnostic test that S2 has valid data input and thus it is ready to connect S2 into the main loop thus an intelligent device 106 as recited in Claim 5 wherein said intelligent device 106 is configured to activate and deactivate said client devices such as S2 as claims.

Referring to claim 8, 18 and 28, Johnson discloses in Table 1 in conjunction with figures 3-5 and on page 7 lines 12 to page 8 lines 27 that an intelligent device 106 as recited in Claim 1 wherein said intelligent device (RDU) employs techniques such that (data from a station "upstream in the diagnostics loop relative to the station being monitored is able to flow to the RDU for analysis) said fault detection is operable to determine a distance (location based of the station/port/connection) from said intelligent device (106) to said fault as claims.

Referring to claim 9, 19 and 29, Johnson discloses on and on page 5, lines 25 to pages 6, lines 27 and on page 19, lines 18-33 of an intelligent device (FDU or RDU) as recited in Claim 1 wherein said intelligent device 106 is configured to receive data packets from said head end 102 since data comes into the hub serially and the data is fed to the RDU as illustrated in figures 2 and 3 for diagnosing system failures as claims.

Referring to claim 10, 20, and 30 Johnson discloses in figures 2 and 3 and on page 5, lines 25 to pages 6, lines 27 in addition to page 19, lines 18-33 of an intelligent device 106 as recited in Claim 9 wherein said data packets are for operating diagnostic tests at said intelligent device for validating network connections as claims.

Response to Arguments

3. Applicant's arguments filed 5/18/04 have been fully considered but they are not persuasive.

Referring to independent claims 1, 11, and 21, Applicant asserts that Johnson in particular does not teach, disclose or suggest an intelligent device including "a first interface for communicatively coupling the intelligent device to said network" as claimed. Applicant also argues that Johnson in particular does not teach, disclose, or suggest an intelligent device coupled to a network having a headend, as claimed. Applicant finally asserts that Johnson in particular does not each disclose, or suggest an intelligent device including a second interface for communicative coupling to a plurality of client devices. Examiner respectfully disagrees and redirects Applicant to Johnson's reference. In specific, Johnson discloses in figure 2 and respective portions of the specification of that the intelligent device 106 (Fixed Diagnostic Unit and Roving Diagnostic Unit) is connected to a network 100 via port 1 and port 2 such that port 1 communicatively couples 106 to network 100. Applicant asserts that system 100 includes three devices: hub 102, station S1 and station S2, Examiner agrees thus confirming the Examiner's notion of a network wherein an intelligent device 106 is connected to system 100. Applicant fails to understand the notion that Johnson teaches that a station is a standalone device, in fact Examiner asserts that the S1 and S2 in connection with Hub device 102 makes a station a part of the network. Thus, a station is not a standalone device, but a device within a network. To Applicant's argument that the diagnostic arrangement is comprised within the hub, and is not comprised within a

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network, Examiner disagrees and directs Applicant to figure 2 and page 20, lines 34-40, where Johnson clearly states that RDU also utilizes methods for diagnosing system failures outside of hub 102. In addition to the previous disclosure, Johnson also resolves the issue that an intelligent device 106 (may be outside the hub or within the hub as described on page 20, lines 34-40) is coupled to a network 100 (which contains S1, S2 and hub) having a headend 102 as illustrated in figure 2 and respective portions of the specification. To address Applicant's final assertion that Johnson in particular does not each disclose, or suggest an intelligent device including a second interface for communicative coupling to a plurality of client devices, Examiner respectfully disagrees for multiple reasons, first is with respect to figure 1, clearly it is shown that Hub 12 has 4 ports, each port connects S1, S2, S3 and S4 respectively, port 2 also enables connecting a protocol analyzer device 20 in addition to S2, thus indicating that an intelligent device includes a second interface (port 2) for communicatively coupling to a plurality of client devices (S2 and 20). A second reason is Johnson discloses on page 5, lines 9-24 that Loop 104 interconnects S1 and S2 such that digital data in accordance with Fibre Channel protocol standards flows around the loop in the direction indicated by the number of arrowheads. Only two stations are illustrated as being interconnected by loop 104 for purposes of simplicity. Thus, suggesting that an intelligent device 106 including a second interface (port 2) for communicatively coupling (via loop 104) to a plurality of client devices such as (S1 and S2) as claim. Another explanation is although figure 2 illustrates that a second interface (port 2) connects only to S2, S2 may be a

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server that connects to multiple client devices. Based on all the reasons provided by Examiner, claims 1, 11 and 21 respectfully stand rejected.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(703)305-9051, (for formal communications; please mark "EXPEDITED
PROCEDURE)

Or:

(703)305-5403 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag G Shah whose telephone number is 703-305-5639. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cgs
July 2, 2004


Ajit Patel
Primary Examiner